

**FILED**

**DEC 15 2015**

**SECRETARY, BOARD OF  
OIL, GAS & MINING**

**BEFORE THE BOARD OF OIL, GAS AND MINING  
DEPARTMENT OF NATURAL RESOURCES  
STATE OF UTAH**

IN THE MATTER OF THE REQUEST FOR AGENCY ACTION OF ULTRA RESOURCES, INC. FOR APPROVAL OF PILOT WATERFLOOD OPERATIONS IN THE EOCENE MIDDLE AND LOWER GREEN RIVER FORMATIONS COMPRISED OF THE SW $\frac{1}{4}$ NE $\frac{1}{4}$ , S $\frac{1}{2}$ NW $\frac{1}{4}$ , SW $\frac{1}{4}$  AND THE W $\frac{1}{2}$ SE $\frac{1}{4}$  OF SECTION 2, TOWNSHIP 8 SOUTH, RANGE 20 EAST, S.L.M., UINTAH COUNTY, UTAH, AND THE S $\frac{1}{2}$ S $\frac{1}{2}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$ , S $\frac{1}{2}$ S $\frac{1}{2}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$ , SW $\frac{1}{4}$ NE $\frac{1}{4}$ , S $\frac{1}{2}$ NW $\frac{1}{4}$ , N $\frac{1}{2}$ SW $\frac{1}{4}$ , AND THE NW $\frac{1}{4}$ SE $\frac{1}{4}$  OF SECTION 3, TOWNSHIP 8 SOUTH, RANGE 20 EAST, S.L.M., UINTAH COUNTY, UTAH, RESPECTIVELY, AND CERTIFICATION OF SAID OPERATIONS AS ENHANCED RECOVERY PROJECTS

**[PROPOSED]  
FINDINGS OF FACT,  
CONCLUSIONS OF LAW AND  
ORDER**

Docket No. 2015-028

Cause No. 270-07

This Cause came on for hearing before the Utah Board of Oil, Gas and Mining (the "Board") on Wednesday, December 9, 2015, at approximately 9:50 a.m., in the Auditorium of the Utah Department of Natural Resources Building in Salt Lake City, Utah. The following Board members were present and participated at the hearing: Chairman Ruland J. Gill, Jr., Carl F. Kendell, Susan S. Davis, Gordon L. Moon and Michael Brown. Board Members Richard Borden and Chris Hansen were unable to attend. The Board was represented by Michael S. Johnson, Esq., Assistant Attorney General.

Testifying on behalf of Petitioner Ultra Resources, Inc. (“Ultra”) were Craig Blancett - Director of Land, Alec Long - Senior District Geologist, and David Wahl - Reservoir Engineering Advisor. Mr. Long and Mr. Wahl were recognized as experts in geology and petroleum engineering, respectively, for purposes of this Cause. Seth A. Loughmiller, Esq., and Frederick M. MacDonald, Esq., of and for MacDonald & Miller Mineral Legal Services, PLLC, appeared as attorneys for Ultra.

The Division of Oil, Gas and Mining (the “Division”) did not file a staff memorandum in this Cause, but participated in the hearing. Steven F. Alder, Esq., Assistant Attorney General, appeared as attorney for the Division. With the Board’s permission, Dustin Doucet, Petroleum Engineer, and John Rogers, Associate Director, asked questions on behalf of the Division. At the conclusion of Ultra’s presentation in-chief, Mr. Rogers expressed that the Division supported the granting of Ultra’s Request for Agency Action dated October 26, 2015 (the “Request”), as conformed to the testimony and other evidence provided at the hearing.

The Bureau of Land Management (“BLM”), a surface and oil and gas owner of the lands at issue in this Cause, filed a letter on November 20, 2015 in support of the granting of the Request. Additionally, the State of Utah School and Institutional Trust Lands Administration (“TLA”), also a surface and oil and gas owner of the lands at issue in this

Cause, filed a letter on December 2, 2015 in support of the granting of the Request. These two letters were included as part of the record in this Cause.

No other party filed a response to the Request and no other party appeared or participated at the hearing.

The Board, having considered the testimony presented and the exhibits received into evidence at the hearing, being fully advised, and for good cause, hereby makes the following findings of fact, conclusions of law and order in this Cause.

### **FINDINGS OF FACT**

1. Ultra is a Wyoming corporation, in good standing, with its principal places of business in Houston, Texas and, as relating to Rocky Mountain operations, including the Project Areas, in Denver, Colorado. Ultra is duly authorized to conduct business in the State of Utah and is fully bonded with all relevant State of Utah and Federal agencies.

2. The oil and gas within the SW $\frac{1}{4}$ NE $\frac{1}{4}$ , S $\frac{1}{2}$ NW $\frac{1}{4}$ , SW $\frac{1}{4}$  and the W $\frac{1}{2}$ SE $\frac{1}{4}$  of Section 2, Township 8 South, Range 20 East, S.L.M. [360 acres] ("Project Area A") are owned by the State of Utah and administered by the TLA, and are entirely subject to State Oil, Gas and Hydrocarbon Lease ML-49318. The oil and gas within the S $\frac{1}{2}$ S $\frac{1}{2}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$ , S $\frac{1}{2}$ S $\frac{1}{2}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$ , SW $\frac{1}{4}$ NE $\frac{1}{4}$ , S $\frac{1}{2}$ NW $\frac{1}{4}$ , N $\frac{1}{2}$ SW $\frac{1}{4}$ , and the NW $\frac{1}{4}$ SE $\frac{1}{4}$  of Section 3, Township 8 South, Range 20 East, S.L.M. [260 acres] ("Project Area B") are owned by the United States of America and administered by the BLM, and are

entirely subject to United States Oil and Gas Lease UTU-85994. UPL Three Rivers Holdings, LLC (“UPL”) is the lessee of and working interest owner under both leases. Ultra is a member of, and operates on behalf of, UPL.

3. The surface of the lands embraced within Project Area A is owned by the State of Utah and administered by the TLA. The surface of the lands embraced within Project Area B is owned by the United States of America and administered by the U.S. Fish and Wildlife Service (“USFWS”) as to the SW¼NE¼ (part of the Ouray National Wildlife Refuge) and the BLM as to the remaining lands.

4. The surface owners within a one-half mile radius of Project Area A are the United States of America (administered by the BLM and the USFWS), certain fee owners, the State of Utah (administered by both TLA and the Utah Division of Forestry, Fire and State Lands (“DFFSL”)), and the United States of America in trust for the Ute Indian Tribe (administered by both the Bureau of Indian Affairs (“BIA”) and the Ute Indian Tribe). Additionally, the surface owners within a one-half mile radius of Project Area B are the United States of America (administered by both the BLM and USFWS), the State of Utah (administered by the TLA), and certain fee owners.

5. The mineral owners within a one-half mile radius of Project Area A are the State of Utah (administered by TLA and DFFSL), the United States of America (administered by the BLM) and certain fee owners. Further, the mineral owners within a

one-half mile radius of Project Area B are the State of Utah (administered by TLA), the United States of America (administered by the BLM) and certain fee owners. Much of the lands surrounding Project Area A and B is currently leased by UPL.

6. Two shallow water wells are located within a one-half mile radius of Project Area A, and five shallow water wells are located within a one-half mile radius of Project Area B. The injection formation is not determined to be an underground source of drinking water.

7. The Eocene Middle and Lower Green River formations are defined for the purposes of this Cause as:

The stratigraphic equivalent of the interval between the TGR<sub>3</sub> marker, as found at 5,019 feet (measured depth) in the Three Rivers 2-13-820 Well and 4,970 feet (measured depth) in the Three Rivers 3-13-820 Well, and the base of the Uteland Butte member, as found at 6,746 feet (measured depth) in the Three Rivers 2-13-820 Well and 6,697 feet (measured depth) in the Three Rivers 3-13-820 Well, said wells being located in the SW $\frac{1}{4}$ NW $\frac{1}{4}$  of Sections 2 and 3 respectively, Township 8 South, Range 20 East, S.L.M.

(the "Subject Formation").

8. As supported by the exhibits and testimony received into evidence, the upper portion of the Subject Formation is comprised of regionally continuous limestones and limey sandstones in the lower layers, but become more sandy and locally continuous at the expense of the limestones as we move further to the East. The upper layers also

consist of mostly locally continuous sands. These layers make the Subject Formation conducive to the proposed waterflooding projects.

9. The Subject Formations in Project Areas A and B are confined by upper and lower intervals of about forty (40) feet of regionally continuous shales and siltstones acting as confining layers, which will prevent migration. The proposed waterflood interval of the Lower Green River pay zone in Project Areas A and B is between these two confining layers.

10. The proposed projects will involve reinjecting water from producing wells on and off lease and will be treated if and as necessary for compatibility per the United States Environmental Protection Agency ("EPA") approval. The estimated maximum injection rates into the wells is 1,500 barrels of water each day depending upon the injectivity of a given well and the rates approved by the EPA, but are likewise subject to modification by the EPA in the approval process (*see* Conclusions of Law No. 3 below).

11. The projects are not expected to impact any of the adjacent lands. The proposed Development and Injection Plan, as demonstrated in Exhibits "F-1," "F-2," "G-1," "G-2," "L-1," and "L-2," admitted into evidence, reflect current well locations, current project pipelines and future injector well locations.

12. The primary recovery for Project Area A is estimated to be 467 MSTBO and the incremental recovery resulting from the proposed waterflood project is estimated

to be 321 MSTBO. The primary recovery for Project Area B is estimated to be 614 MSTBO and the incremental recovery resulting from the proposed waterflood project is estimated to be 251 MSTBO.

13. In addition to the general waterflood goals of increased recovery and maintenance of reservoir pressure, reduction of waterflood uncertainty and determining the optimal pattern configuration and spacing for waterflood, the specific goals of the Project Area A waterflood are: (a) evaluating response in an 80-acre inverted five (5)-spot pattern; (b) determining injectivity of specific members of the Lower Green River formation; (c) measuring waterflood production response timing in produced wells; and d) identifying through tracer surveys how much water each zone will take.

14. In addition to the general waterflood goals of increased recovery and maintenance of reservoir pressure, reduction of waterflood uncertainty and determining the optimal pattern configuration and spacing for waterflood, the specific goals of the Project Area B waterflood are: (a) testing injectivity with an injection well completed specifically for water injection; and (b) evaluating response in a direct line drive pattern configuration.

15. As supported by exhibits and testimony received into evidence, the projects are necessary to recover resources that would otherwise be left in place, and the value of

the projected incremental production substantially exceeds the cost incident to the enhanced recovery operations.

16. A copy of the Request was mailed, postage pre-paid, certified with return receipt requested, and properly addressed to all surface and mineral owners, "owners" as that term is defined in Utah Code Ann. § 40-6-2(17) and Utah Admin. Code Rule R649-1, and operators within a one-half mile radius of Project Areas A and B, and all mineral, leasehold and production interest owners in Project Areas A and B. The mailings were sent to said parties at their last addresses disclosed by the relevant BLM, TLA, DFFSL, BIA, Division, Utah State Engineer and Uintah County realty records.

17. Notice of the filing of the Request and of the hearing thereon was duly published in the Uintah Basin Standard and the Vernal Express on November 17, 2015, and in the Salt Lake Tribune and Deseret Morning News on November 15, 2015.

18. The vote of the Board members present and participating in the hearing on this Cause was unanimous (5-0) in favor of granting the Request.

### **CONCLUSIONS OF LAW**

1. Due and regular notice of the time, place and purpose of the hearing was properly given to all parties whose legally protected interests are affected by the Request



in the form and manner as required by law and the rules and regulations of the Board and Division.

2. The Board has jurisdiction over all matters covered by the Request and all interested parties therein, and has power and authority to render the order herein set forth pursuant to Utah Code Ann. §§ 40-6-5(3)(c), 40-6-7(1) and 59-5-102(7), and Utah Admin. Code Rules R649-2-1, R649-3-37 and R649-5-1, *et seq.*

3. Because Project Areas A and B are within the boundaries of the Uncompahgre Reservation, underground injection control jurisdiction is retained by the EPA and has not been delegated to the Board and Division. Consequently, Ultra will be making the appropriate applications to the EPA for injection well approval.

4. Vacating the 270-02 Order and suspension of the general well location and siting rule (Utah Admin. Code Rule R649-3-2) to the extent inconsistent with the project is just and reasonable under the circumstances.

5. Approval of Project Areas A and B for enhanced recovery purposes are in the public interest, will promote conservation, and will increase ultimate recovery without waste and with protection of correlative rights.

6. Project Areas A and B qualify as “Enhanced Recovery Projects” for purposes of Utah Code Ann. §59-5-102(7).

7. Ultra has sustained its burden of proof, demonstrated good cause, and satisfied all legal requirements for the granting of the Request.

### **ORDER**

Based on the Request, testimony and evidence submitted, and the findings of fact and conclusions of law stated above, the Board hereby orders:

1. The Request in this Cause is granted.
2. The plans of waterflood and enhanced recovery are approved.
3. The 270-02 Order and the Board's general well location and siting rules are vacated to the extent inconsistent with the development and operation of Project Areas A and B as outlined in the evidence of record; provided, however, that no well may be drilled closer than 460 feet to a boundary of the Project Areas without an exception location approval from the Division or the Board in accordance with Utah Admin. Code Rule R649-3-3.
4. Project Areas A and B are hereby approved and certified as "Enhanced Recovery Projects" in accordance with Utah Code §§40-6-7(1) and 59-5-102(7) and Utah Admin. Code Rule R649-3-37.
5. Pursuant to Utah Admin. Code Rules R641 and Utah Code Ann. §63G-4-204 to 208; the Board has considered and decided this matter as a formal adjudication.

6. This Order is based exclusively on evidence of record in the adjudicative proceeding or on facts officially noted as weighed and analyzed by the Board in the exercise of its expertise as set forth in Utah Code Ann. §40-6-4(2)(a) through (3), and constitutes the signed written order stating the Board's decision and the reasons for the decision, all as required by the Administrative Procedures Act, Utah Code Ann. §63G-4-208 and Utah Admin. Code Rule R641-109.

7. Notice re: Right to Seek Judicial Review by the Utah Supreme Court or to Request Board Reconsideration: As required by Utah Code Ann. §63G-4-208(1)(e) - (g), the Board hereby notifies all parties in interest that they have the right to seek judicial review of this final Board Order in this formal adjudication by filing a timely appeal with the Utah Supreme Court within 30 days after the date that this Order issued. Utah Code Ann. §§63G-4-401(3)(a) and 403. As an alternative to seeking immediate judicial review, and not as a prerequisite to seeking judicial review, the Board also hereby notifies parties that they may elect to request that the Board reconsider this Order, which constitutes a final agency action of the Board. Utah Code Ann. §63G-4-302, entitled, "Agency Review – Reconsideration," states:

(1)(a) Within 20 days after the date that an order is issued for which review by the agency or by a superior agency under Section 63G-4-301 is unavailable, and if the order would otherwise constitute final agency action, any party may file a written request for reconsideration with the agency, stating the specific grounds upon which relief is requested.

(b) Unless otherwise provided by statute, the filing of the request is not a prerequisite for seeking judicial review of the order.

(2) The request for reconsideration shall be filed with the agency and one copy shall be sent by mail to each party by the person making the request.

(3)(a) The agency head, or a person designated for that purpose, shall issue a written order granting the request or denying the request.

(b) If the agency head or the person designated for that purpose does not issue an order within 20 days after the filing of the request, the request for reconsideration shall be considered to be denied.

*Id.* The Board also hereby notifies the parties that Utah Admin. Code Rule R641-110-100, which is part of a group of Board rules entitled, "Rehearing and Modification of Existing Orders," states:

Any person affected by a final order or decision of the Board may file a petition for rehearing. Unless otherwise provided, a petition for rehearing must be filed no later than the 10<sup>th</sup> day of the month following the date of signing of the final order or decision for which the rehearing is sought. A copy of such petition will be served on each other party to the proceeding no later than the 15<sup>th</sup> day of the month.

*Id.* See Utah Admin. Code Rule R641-110-200 for the required contents of a petition for Rehearing. If there is any conflict between the deadline in Utah Code Ann. §63G-4-302 and the deadline in Utah Admin. Code Rule R641-110-100 for moving to rehear this matter, the Board hereby rules that the later of the two deadlines shall be available to any party moving to rehear this matter. If the Board later denies a timely petition for

rehearing, the party may still seek judicial review of the Order by perfecting a timely appeal with the Utah Supreme Court within 30 days thereafter.

The Board retains continuing jurisdiction over all the parties and over the subject matter of this cause, except to the extent said jurisdiction may be divested by the filing of a timely appeal to seek judicial review of this order by the Utah Supreme Court.

For all purposes, the Chairman's signature on a faxed copy of this Order shall be deemed the equivalent of a signed original.

DATED this \_\_\_\_\_ day of December, 2015.

**STATE OF UTAH  
BOARD OF OIL, GAS AND MINING**

By: \_\_\_\_\_  
Ruland J. Gill, Jr., Chairman

### CERTIFICATE OF SERVICE

I hereby certify that, on this 15 day of December, 2015, I caused a true and correct copy of the foregoing Proposed Findings of Fact, Conclusions of Law and Order to be mailed, postage pre-paid, and sent electronically to the following:

Mr. John Rogers  
Associate Director - Oil & Gas  
Utah Division of Oil, Gas and Mining  
1594 West North Temple, Suite 1210  
P.O. Box 145801  
Salt Lake City, Utah 84114-5801  
E-mail: johnrogers@utah.gov

Michael S. Johnson, Esq.  
Assistant Attorney General  
Attorney for the Board of Oil, Gas and  
Mining  
1594 West North Temple, Suite 300  
P.O. Box 145801  
Salt Lake City, Utah 84114-5801  
E-mail: mikejohnson@utah.gov

Steven F. Alder, Esq.  
Assistant Attorney General  
Attorney for the Division of Oil, Gas and  
Mining  
1594 West North Temple, Suite 300  
P.O. Box 145801  
Salt Lake City, Utah 84114-5801  
E-mail: stevealder@utah.gov



Seth A. Loughmiller, Esq.